

## Patent Claims

1. A modular universal adapter telemedicine system comprising
  - a) function modules, varying in number and in function, for diagnostic testing, communication and identification;
  - 5 b) a universal adapter to connect the function modules to a
  - c) process module that provides data output, data processing and data transmission.
- 10 2. A modular universal adapter according to claim 1, characterized in that the data collected during use of the function modules are measurable medical parameters and/or identification features and/or audiovisual data and/or geographic position data.
- 15 3. A modular universal adapter - telemedicine system according to claim 1 or 2, characterized in that at least one function module, and in particular all function modules, can be easily operated in the same manner using the universal adapter by means of a two-knob controller.
4. A modular universal adapter telemedicine system according to one of the previous claims, characterized in that at least one diagnostic function module is provided for the purposes of medical diagnostic testing.
5. A modular universal adapter telemedicine system according to claim 4,

characterized in that the diagnostic function module is an electrocardiograph, a pulsoximeter, a spirometer, a blood pressure measurement device, a thermometer, a cardiotocograph, a heart beat monitor [event recorder], a blood sugar measuring device and/or similar.

5     6. A modular universal adapter telemedicine system according to one of the previous claims, characterized in that the function modules include at least one identification module to record identification features of a patient.

10    7. A modular universal adapter telemedicine system according to claim 6, characterized in that the identification module involves a function to record biometric data of the patient [such as fingerprints, iris] and/or to read identification cards.

15    8. A modular universal adapter telemedicine system according to one of the previous claims, characterized in that the function modules include at least one communication module for audiovisual communication.

20    9. A modular universal adapter telemedicine system according to claim 8, characterized in that the communication module involves functions to record speech, pictures and video data and to transmit the data in real time.

10.A modular universal adapter telemedicine system according to one of the previous claims, characterized in that the function modules include a locating module to locate the geographic position of the telemedicine system.

11.A modular universal adapter telemedicine system according to claim 10, characterized in that the locating module is a GPS module to determine and to transmit geographic position data.

12.A modular universal adapter telemedicine system according to claim 11,  
characterized in that the GPS module is integrated into the universal adapter.

13.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that the process module includes means to  
5 process, output and transmit data, in particular communication devices [cellular  
telephones], computers, printers and similar means.

14.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that at least one function module, and in  
particular all function modules, and the universal adapter have their own  
10 internal battery.

15.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that at least one function module, in particular  
all function modules, and the universal adapter have a universal I/O connection  
through which the data transmission between the modules and/or charging of  
15 the function modules' batteries takes place.

16.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that the universal adapter includes a wireless  
interface, in particular a WLAN or Bluetooth interface, through which the data  
can be exchanged with the process module and/or with function modules  
20 equipped with wireless interfaces, wherein the data transmission to the process  
module can just as easily be accomplished using a hard-wired I/O connection.

17.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that the universal adapter includes a function  
to automatically register connected function modules.

18.A modular universal adapter telemedicine system according to one of the previous claims, characterized in that at least one function module, in particular all function modules, and the universal adapter have a central processor and non-mechanical memory to store data temporarily and/or for a longer period.

5     19.A modular universal adapter telemedicine system according to one of the previous claims, characterized in that at least one function module, and in particular all function modules, have their own control elements as well as numerous acoustic /visual signal elements and a function display and/or display on the outside of the module.

10    20.A modular universal adapter telemedicine system according to one of the previous claims, characterized in that the universal adapter has four control elements and numerous acoustic /visual signal elements and a function display and/or display on the outside of the module.

15    21.A modular universal adapter telemedicine system according to claim 20, characterized in that at least one function module, in particular all function modules, can be easily operated through two of the four control elements located on the outside of the universal adapter concerning basic functions such as data recording, transmission and status inquiries.

20    22.A modular universal adapter telemedicine system according to claim 20, characterized in that at least one function module, in particular all function modules, and the universal adapter can be expanded in operation and configuration through the four control elements located on the outside of the universal adapter.

23.A modular universal adapter telemedicine system according to one of the



previous claims, characterized in that the universal adapter and the function modules can be operated in different user modes.

24.A modular universal adapter telemedicine system according to claim 23,  
characterized in that user modes are available for the patient, the physician,  
use by multiple patients and/or remote access by the physician's receiving  
center.

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25.A modular universal adapter telemedicine system according to claim 23 or 24,  
characterized in that the process module includes a function to change the  
user mode of the universal adapter.

10 26.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that at least one function module, in  
particular all function modules, can be used either [a] using the universal  
adapter and a process module to transmit data directly or [b] separately without  
the universal adapter.

15 27.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that the ability is available to perform wireless  
communication between the universal adapters of multiple modular universal  
adapter telemedicine systems, and to use a process module in common  
through a wireless or hard-wired transmission path to said process module.

20 28.A modular universal adapter telemedicine system according to one of the  
previous claims, characterized in that diagnostic and therapeutic plan  
monitoring and medical monitoring software is integrated into the universal  
adapter, depending on the function modules registered.